



PAGE:
04/02/2008

VERIFICATION SUMMARY REPORT

DATE:

09:03:58

PATENT APPLICATION

TIME:

INPUT SEQ: D:\FELD3002CIP2.ST25.txt

GENERAL INFORMATION SECTION

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|-------------|---|
| 1,<110> | Feldmann, Richard J. |
| 3,<120> | Symmetry relationships between pairs of |
| Connectrons | |
| 5,<130> | FELD3002CIP2 |
| 7,<140> | US 10/803,195 |
| 8,<141> | 18 March 2004 |
| 10,<160> | 120 |
| 12,<170> | Proprietary |

ERRORED LINES SECTION

STATISTICS SUMMARY

Application Serial Number: US 10/803,195
Alpha or Numeric or Xml: Numeric
Application Class:
Application File Date: 18 March 2004
Art Unit:
Software Application: OTHER
Total Number of Sequences: 120
Total Nucleotides: 6848
Total Amino Acids: 0
Number of Errors: 0
Number of Warnings: 0
Number of Corrections: 0



FELD3002CIP2.ST25

<110> Feldmann, Richard J.

<120> Symmetry relationships between pairs of Connectrons

<130> FELD3002CIP2

<140> US 10/803,195

<141> 18 March 2004

<160> 120

<170> Proprietary

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<213> Escherichia coli K-12 MG1655 complete genome

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tc 182

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Page 1

FELD3002CIP2.ST25

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|------------|------------|------------|------------|------------|------------|-----|
| tgtctttctc | ggctctgttg | ttagctgagc | agcaaccaga | tctagttcat | gttgagtata | 120 |
| ttgggcaaga | catgtctttt | taggaaagta | ctgccgaatt | agcccatttg | t | 171 |

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| tgtctttctc | ggctctgttg | ttagctgagc | agcaaccaga | tctagttcat | gttgagtata | 120 |
| ttgggcaaga | catgtctttt | taggaaagta | ctgccgaatt | agcccatttg | t | 171 |

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<211> 67

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<213> Sulfolobus tokodaii complete genome

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| tacatga | | | | | | 67 |

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| aagggaagttt | tctcccttga | ataaa | | | | | 85 |

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<222> (975950)...(976066)

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| ctaaattagtagt | ggaagctgaa | acgcaaggat | tgataatgta | ataggatcaa | tgaatat | | 117 |

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| ctaaattagtagt | ggaagctgaa | acgcaaggat | tgataatgta | ataggatcaa | tgaatat | | 117 |

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<211> 117

<212> DNA

<213> Saccharomyces cerevisiae complete genome

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<222> (975950)...(976066)

<223> Chromosome = 15 Contig = 15 Strand = pos CtronObjNum = 28455

FELD3002CIP2.ST25

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|------------|------------|------------|------------|------------|-----------|--|-----|
| <400> | 11 | | | | | | |
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| ctaaattagt | ggaagctgaa | acgcaaggat | tgataatgta | ataggatcaa | tgaatat | | 117 |

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<211> 117

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<211> 68

<212> DNA

<213> Caenorhabditis elegans complete genome

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<222> (221205)...(221272)

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| catgtcga | | | | | | | 68 |

<210> 14

<211> 68

<212> DNA

<213> Caenorhabditis elegans complete genome

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| catgtcga | | | | | | | 68 |

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<211> 68

<212> DNA

<213> Caenorhabditis elegans complete genome

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<222> (221180)...(221247)

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ttggccat                                     68

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ttggccat                                     68

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<211> 58

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<213> Arabidopsis thaliana complete genome

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taattatggc caaatccaag ttctagagtt ttct 94

<210> 22

<211> 94

<212> DNA

<213> Arabidopsis thaliana complete genome

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<222> (3780765)...(3780858)

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taattatggc caaatccaag ttctagagtt ttct 94

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<211> 79

<212> DNA

<213> Arabidopsis thaliana complete genome

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<222> (21590870)...(21590950)

<223> Chromosome = 5 Contig = 1 Strand = neg CtronObjNum = 29822

FELD3002CIP2.ST25

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| taattatggc | caaatccaa | | | | | | 79 |
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| <210> | 24 | | | | | | |
| <211> | 79 | | | | | | |
| <212> | DNA | | | | | | |
| <213> | Arabidopsis thaliana complete genome | | | | | | |
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| taattatggc | caaatccaa | | | | | | 79 |
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| <210> | 25 | | | | | | |
| <211> | 27 | | | | | | |
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| <222> | (4454807)...(4454833) | | | | | | |
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| <210> | 26 | | | | | | |
| <211> | 27 | | | | | | |
| <212> | DNA | | | | | | |
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| <210> | 27 | | | | | | |
| <211> | 35 | | | | | | |
| <212> | DNA | | | | | | |
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gttttgtca                                     189

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ctttatcaac aatggaatcc caacaatta                                     89

<210>          49
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<220>
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<400>          49
tggctctgcta aatcg                                                    15

<210>          50
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<220>
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<400>          50
tggctctgcta aatcg                                                    15

<210>          51
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<220>
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<400>          51
aaacttgtag tttgtagt                                                    18

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<210> 52
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 <212> DNA
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 <222> (486479)...(486496)
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 <400> 52
 aaactttag tttgtagt 18
 <210> 53
 <211> 16
 <212> DNA
 <213> Caenorhabditis elegans complete genome
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 <400> 53
 atttagcaga cccaaa 16
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 <400> 54
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 <400> 55
 aaactacaaa tttcgattt 19
 <210> 56
 <211> 19

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<212>      DNA
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<220>
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<400>      56
aaactacaaa tttcgattt                                     19

<210>      57

<211>      39
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<213>      Homo sapiens complete genome

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<223>      Chromosome = 920  Contig = 19  Strand = pos  CtronObjNum = 756303

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agcccgagcc ccacctctcc cttagggacc tccgcccac                                     39

<210>      58

<211>      39
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<213>      Homo sapiens complete genome

<220>
<222>      (21820715)...(21820754)
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<400>      58
agcccgagcc ccacctctcc cttagggacc tccgcccac                                     39

<210>      59

<211>      41
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<213>      Homo sapiens complete genome

<220>
<222>      (21789080)...(21789121)
<223>      Chromosome = 920  Contig = 19  Strand = pos  CtronObjNum = 756303

<400>      59
acctccgccc acctaccct caagccagga tgcccggagc g                                     41

<210>      60

<211>      41
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<210>      61
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<213>      Homo sapiens complete genome

<220>
<222>      (21808781)...(21808820)
<223>      Chromosome = 920  Contig = 19  Strand = neg  CtronObjNum = 756433

<400>      61
cctaagggag aggtggggct cgggctgaat ccctcgttgg                                40

<210>      62
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<213>      Homo sapiens complete genome

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<222>      (21827338)...(21827377)
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<400>      62
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<210>      63
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<213>      Homo sapiens complete genome

<220>
<222>      (21808740)...(21808773)
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<400>      63
gctccgggca tcctggcttg agggtagagt gggc                                34

<210>      64
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<213>      Homo sapiens complete genome

<220>
<222>      (21820748)...(21820781)
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<400> 64
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<211> 20

<212> DNA

<213> Arabidopsis thaliana complete genome

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<222> (5320517)...(5320536)

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<210> 66

<211> 20

<212> DNA

<213> Arabidopsis thaliana complete genome

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<222> (5311160)...(5311179)

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<210> 67

<211> 30

<212> DNA

<213> Arabidopsis thaliana complete genome

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<223> Chromosome = 18 Contig = 4 Strand = pos CtronObjNum = 269631

<400> 67

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<210> 68

<211> 30

<212> DNA

<213> Arabidopsis thaliana complete genome

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<210> 69

<211> 39

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<223> Chromosome = 18 Contig = 4 Strand = neg CtronObjNum = 269741

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39

<210> 70

<211> 39

<212> DNA

<213> Arabidopsis thaliana complete genome

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<223> Chromosome = 18 Contig = 4 Strand = neg CtronObjNum = 269881

<400> 70

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39

<210> 71

<211> 16

<212> DNA

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<223> Chromosome = 18 Contig = 4 Strand = neg CtronObjNum = 269741

<400> 71

ccaccatacgc tctaca

16

<210> 72

<211> 16

<212> DNA

<213> Arabidopsis thaliana complete genome

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<222> (5311176)...(5311191)

<223> Chromosome = 18 Contig = 4 Strand = neg CtronObjNum = 269509

<400> 72

ccaccatacgc tctaca

16

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<210>          73
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<220>
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aacgccttat ccggcctacg g                                21

<210>          74
<211>          21
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<213>          Escherichia coli K-12 MG1655 complete genome

<220>
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<400>          74
aacgccttat ccggcctacg g                                21

<210>          75
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<220>
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gtaggcctga taagacgcg                                    19

<210>          76
<211>          19
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<213>          Escherichia coli K-12 MG1655 complete genome

<220>
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gtaggcctga taagacgcg                                    19

<210>          77
<211>          42

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<212>      DNA
<213>      Escherichia coli K-12 MG1655 complete genome

<220>
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<210>      78

<211>      42
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<213>      Escherichia coli K-12 MG1655 complete genome

<220>
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<210>      79

<211>      37
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<222>      (376717)...(376753)
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<400>      79
ccggataagg cgttcacgcc gcatccggca gtcgtgc 37

<210>      80

<211>      37
<212>      DNA
<213>      Escherichia coli K-12 MG1655 complete genome

<220>
<222>      (376617)...(376653)
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<400>      80
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<210>      81

<211>      105
<212>      DNA
<213>      Saccharomyces cerevisiae complete genome

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<220>
 <222> (111321)...(111425)
 <223> Chromosome = 7 Contig = 7 Strand = neg CtronObjNum = 10928

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 cgcaaggatt gataatgtaa taggatcaat gaatattaac atata 105

<210> 82

<211> 105

<212> DNA

<213> Saccharomyces cerevisiae complete genome

<220>
 <222> (84359)...(84463)
 <223> Chromosome = 3 Contig = 3 Strand = pos CtronObjNum = 2988

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 cgcaaggatt gataatgtaa taggatcaat gaatattaac atata 105

<210> 83

<211> 38

<212> DNA

<213> Saccharomyces cerevisiae complete genome

<220>
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 <223> Chromosome = 7 Contig = 7 Strand = neg CtronObjNum = 10945

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<210> 84

<211> 38

<212> DNA

<213> Saccharomyces cerevisiae complete genome

<220>
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 <223> Chromosome = 3 Contig = 3 Strand = neg CtronObjNum = 3500

<400> 84
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<210> 85

<211> 152

<212> DNA

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<220>

FELD3002CIP2.ST25

<222> (645641)...(645792)
 <223> Chromosome = 4 Contig = 4 Strand = neg CtronObjNum = 5116

| | | | | | | | |
|------------|------------|------------|------------|-------------|------------|--|-----|
| <400> | 85 | | | | | | |
| tcatctacta | actagtat | acgttactag | tatattatca | tatacgggtgt | tagaagatga | | 60 |
| cgcaaatgat | gagaaatagt | catctaaatt | agtggaagct | gaaacgcaag | gattgataat | | 120 |
| gtaataggat | caatgaatat | taacatataa | aa | | | | 152 |

<210> 86

<211> 152

<212> DNA

<213> Saccharomyces cerevisiae complete genome

<220>
 <222> (84315)...(84466)
 <223> Chromosome = 3 Contig = 3 Strand = pos CtronObjNum = 2991

| | | | | | | | |
|------------|------------|------------|------------|-------------|------------|--|-----|
| <400> | 86 | | | | | | |
| tcatctacta | actagtat | acgttactag | tatattatca | tatacgggtgt | tagaagatga | | 60 |
| cgcaaatgat | gagaaatagt | catctaaatt | agtggaagct | gaaacgcaag | gattgataat | | 120 |
| gtaataggat | caatgaatat | taacatataa | aa | | | | 152 |

<210> 87

<211> 143

<212> DNA

<213> Saccharomyces cerevisiae complete genome

<220>
 <222> (645641)...(645783)
 <223> Chromosome = 4 Contig = 4 Strand = neg CtronObjNum = 5116

| | | | | | | | |
|------------|------------|------------|------------|-------------|------------|--|-----|
| <400> | 87 | | | | | | |
| tcatctacta | actagtat | acgttactag | tatattatca | tatacgggtgt | tagaagatga | | 60 |
| cgcaaatgat | gagaaatagt | catctaaatt | agtggaagct | gaaacgcaag | gattgataat | | 120 |
| gtaataggat | caatgaatat | taa | | | | | 143 |

<210> 88

<211> 143

<212> DNA

<213> Saccharomyces cerevisiae complete genome

<220>
 <222> (168762)...(168904)
 <223> Chromosome = 3 Contig = 3 Strand = neg CtronObjNum = 3496

| | | | | | | | |
|------------|------------|------------|------------|-------------|------------|--|-----|
| <400> | 88 | | | | | | |
| tcatctacta | actagtat | acgttactag | tatattatca | tatacgggtgt | tagaagatga | | 60 |
| cgcaaatgat | gagaaatagt | catctaaatt | agtggaagct | gaaacgcaag | gattgataat | | 120 |
| gtaataggat | caatgaatat | taa | | | | | 143 |

<210> 89

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<211>          34
<212>          DNA
<213>          Caenorhabditis elegans complete genome

<220>
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<223>          Chromosome = 6 Contig = 2 Strand = neg CtronObjNum = 51392

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<210>          90

<211>          34
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<213>          Caenorhabditis elegans complete genome

<220>
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<400>          90
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<210>          91

<211>          34
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<220>
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<400>          91
accgaaccca acggccctct ttagggccac aaat          34

<210>          92

<211>          34
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<220>
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<223>          Chromosome = 6 Contig = 2 Strand = pos CtronObjNum = 51400

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<210>          93

<211>          48
<212>          DNA
<213>          Caenorhabditis elegans complete genome

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<220>
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<223>      Chromosome = 6  Contig = 2  Strand = neg  CtronObjNum = 51410

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<210>      94
<211>      48
<212>      DNA
<213>      Caenorhabditis elegans complete genome

<220>
<222>      (13817583)...(13817630)
<223>      Chromosome = 6  Contig = 2  Strand = neg  CtronObjNum = 51379

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<210>      95
<211>      39
<212>      DNA
<213>      Caenorhabditis elegans complete genome

<220>
<222>      (13820800)...(13820840)
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<400>      95
ctaaccgaac ccaacggccc tctttagggc cacaaatgt      39

<210>      96
<211>      39
<212>      DNA
<213>      Caenorhabditis elegans complete genome

<220>
<222>      (13820550)...(13820584)
<223>      Chromosome = 6  Contig = 2  Strand = pos  CtronObjNum = 51400

<400>      96
ctaaccgaac ccaacggccc tctttagggc cacaaatgt      39

<210>      97
<211>      28
<212>      DNA
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<220>
<222>      (12540150)...(12540174)

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      <223>      Chromosome = 15      Contig = 3      Strand = neg      CtronObjNum = 102175

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<210> 98

<211> 28

<212> DNA

<213> Arabidopsis thaliana complete genome

<220>

<222> (13558720) ... (13558750)

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<400> 98

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<210> 99

<211> 35

<212> DNA

<213> Arabidopsis thaliana complete genome

<220>

<222> (12540184) ... (12540220)

<223> Chromosome = 15 Contig = 3 Strand = neg CtronObjNum = 102176

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$\langle 210 \rangle$ 100

<211> 35

<212> DNA

<213> Arabidopsis thaliana complete genome

<220>

<222> (13634210) ... (13634240)

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<223>      Chromosome = 15  Contig = 3  Strand = pos  CtronObjNum = 103090
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| | |
|-------|-----|
| <400> | 100 |
|-------|-----|

acattcatta qttctggaac qtqaatcaa caatg 35

<210> 101

<211> 37

<212> DNA

<213> Arabidopsis thaliana complete genome

<220>

<222> (13626660) ... (13626700)

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<223>      Chromosome = 15  Contig = 3  Strand = pos  CtronObjNum = 103067
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<400> 101
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<210> 102

<211> 37

<212> DNA

<213> Arabidopsis thaliana complete genome

<220>

<222> (13558713)...(13558750)

<223> Chromosome = 15 Contig = 3 Strand = neg CtronObjNum = 102902

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<210> 103

<211> 68

<212> DNA

<213> Arabidopsis thaliana complete genome

<220>

<222> (13626624)...(13626691)

<223> Chromosome = 15 Contig = 3 Strand = pos CtronObjNum = 103067

<400> 103
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gctaaggt 68

<210> 104

<211> 68

<212> DNA

<213> Arabidopsis thaliana complete genome

<220>

<222> (13634202)...(13634270)

<223> Chromosome = 15 Contig = 3 Strand = pos CtronObjNum = 103090

<400> 104
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gctaaggt 68

<210> 105

<211> 82

<212> DNA

<213> Saccharomyces cerevisiae complete genome

<220>

<222> (84112)...(84193)

<223> Chromosome = 3 Contig = 3 Strand = pos CtronObjNum = 2944

<400> 105

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| | | | | | | |
|-------------|------------|------------|------------|------------|------------|----|
| atacgtttga | agaaatcact | ttatggattg | aaacaaagtg | gagcgaactg | gtacgaaact | 60 |
| atcaaatacat | acctgataaa | ac | | | | 82 |

<210> 106

<211> 82

<212> DNA

<213> Saccharomyces cerevisiae complete genome

<220>

<222> (82743)...(82824)

<223> Chromosome = 3 Contig = 3 Strand = pos CtronObjNum = 2901

<400> 106

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|----|
| atacgtttga | agaaatcact | ttatggattg | aaacaaagtg | gagcgaactg | gtacgaaact | 60 |
| atcaaatacat | acctgataaa | ac | | | | 82 |

<210> 107

<211> 34

<212> DNA

<213> Saccharomyces cerevisiae complete genome

<220>

<222> (84195)...(84228)

<223> Chromosome = 3 Contig = 3 Strand = pos CtronObjNum = 2965

<400> 107

| | | | | |
|------------|------------|------------|------|----|
| gaaacgtgac | ggtactcata | aagctagatt | tggt | 34 |
|------------|------------|------------|------|----|

<210> 108

<211> 34

<212> DNA

<213> Saccharomyces cerevisiae complete genome

<220>

<222> (169327)...(169360)

<223> Chromosome = 3 Contig = 3 Strand = pos CtronObjNum = 3529

<400> 108

| | | | | |
|------------|------------|------------|------|----|
| gaaacgtgac | ggtactcata | aagctagatt | tggt | 34 |
|------------|------------|------------|------|----|

<210> 109

<211> 16

<212> DNA

<213> Saccharomyces cerevisiae complete genome

<220>

<222> (151534)...(151549)

<223> Chromosome = 3 Contig = 3 Strand = neg CtronObjNum = 3387

<400> 109

| | |
|------------|--------|
| taattgttgg | gattcc |
|------------|--------|

16

FELD3002CIP2.ST25

```

<210>          110
<211>          16
<212>          DNA
<213>          Saccharomyces cerevisiae complete genome

<220>
<222>          (169308)...(169323)
<223>          Chromosome = 3  Contig = 3  Strand = neg  CtronObjNum = 3526

<400>          110
taattgttgg  gattcc                                     16

<210>          111
<211>          16
<212>          DNA
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<220>
<222>          (151516)...(151531)
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<400>          111
aaaggctata  atatta                                     16

<210>          112
<211>          16
<212>          DNA
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<220>
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<400>          112
aaaggctata  atatta                                     16

<210>          113
<211>          32
<212>          DNA
<213>          Homo sapiens complete genome

<220>
<222>          (17572332)...(17572363)
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ccagccccctc  ctccctcaga  cccaggagtc  ca                                     32

<210>          114

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<211>          32
<212>          DNA
<213>          Homo sapiens complete genome

<220>
<222>          (27988178)...(27988209)
<223>          Chromosome = 922  Contig = 19  Strand = neg  CtronObjNum = 765474

<400>          114
ccagcccctc  ctccctcaga  cccaggagtc  ca                                32

<210>          115

<211>          32
<212>          DNA
<213>          Homo sapiens complete genome

<220>
<222>          (17572369)...(17572400)
<223>          Chromosome = 920  Contig = 19  Strand = pos  CtronObjNum = 747777

<400>          115
ccagcccctc  ctccctcaga  cccaggagtc  ca                                32

<210>          116

<211>          32
<212>          DNA
<213>          Homo sapiens complete genome

<220>
<222>          (28004852)...(28004883)
<223>          Chromosome = 922  Contig = 19  Strand = pos  CtronObjNum = 765567

<400>          116
ccagcccctc  ctccctcaga  cccaggagtc  ca                                32

<210>          117

<211>          40
<212>          DNA
<213>          Homo sapiens complete genome

<220>
<222>          (17573447)...(17573486)
<223>          Chromosome = 920  Contig = 19  Strand = pos  CtronObjNum = 747819

<400>          117
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<210>          118

<211>          40
<212>          DNA

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<213>      Homo sapiens complete genome

<220>
<222>      (27988176)...(27988215)
<223>      Chromosome = 922  Contig = 19  Strand = neg  CtronObjNum = 765474

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<210>      119

<211>      39
<212>      DNA
<213>      Homo sapiens complete genome

<220>
<222>      (17573520)...(17573557)
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<210>      120

<211>      39
<212>      DNA
<213>      Homo sapiens complete genome

<220>
<222>      (28004848)...(28004887)
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<400>      120
ggccccagcc  cctcctccct  cagaccagg  agtcagg      39

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